

LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-20. (Canceled).

21. (**Currently amended**) An in vitro assay for neutrophil activity comprising:

- (a) obtaining a neutrophil sample from a mammal;
- (b) activating neutrophils in the neutrophil sample; and
- (c) observing whether ~~a reactive oxygen species~~ ozone can be detected in the neutrophil sample.

22-25. (Canceled).

26. (**Currently amended**) The method of claim 21, wherein ~~the reactive oxygen species~~ ozone is detected with a chemical probe.

27. (Original) The method of claim 26, wherein the chemical probe is an alkene that can be oxidized and that generates a detectable oxidation product.

28. (Original) The method of claim 26, wherein the chemical probe is 3-vinyl-benzoic acid, 4-vinyl-benzoic acid, indigo carmine, stilbene, or cholesterol.

29. (**Currently amended**) The method of claim 27, wherein an oxidation product of the chemical probe is detected in order to determine whether ~~a reactive oxygen species~~ ozone is present in the neutrophil sample.

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30. (Original) The method of claim 29, wherein the oxidation product is detected by high pressure liquid chromatography, mass spectrometry, ultraviolet light spectrophotometry, visible light spectrophotometry, liquid chromatography, gas spectrometry, or liquid chromatography linked mass spectrometry.

31. (**Currently amended**) A method for identifying an agent that can modulate neutrophil activity comprising:

- (a) obtaining a neutrophil sample from a mammal;
- (b) exposing the neutrophil sample to a test agent;
- (c) activating neutrophils in the neutrophil sample; and
- (d) quantifying an amount of ~~reactive oxygen species~~ ozone generated by the neutrophil sample.

32. (**Currently amended**) The method of claim 31, wherein the method further comprises quantifying an amount of ~~reactive oxygen species~~ ozone generated by a neutrophil sample that has not been exposed to the test agent but is from the same mammal.

33. (Original) The method of claim 31, wherein the neutrophil sample is a bodily fluid.

34. (Original) The method of claim 33, wherein the bodily fluid is whole blood, synovial fluid or lymph.

35. (Original) The method of claim 31, wherein the neutrophil sample is a tissue sample.

36-39. (Canceled)

40. (**Currently amended**) The method of claim 31, wherein the amount of ~~reactive oxygen species~~ ozone is quantified with a

chemical probe.

41. (Original) The method of claim 40, wherein the chemical probe is an alkene that can be oxidized and that generates a detectable oxidation product.

42. (Original) The method of claim 40, wherein the chemical probe is 3-vinyl-benzoic acid, 4-vinyl-benzoic acid, indigo carmine, stilbene, or cholesterol.

43. (Original) The method of claim 40, wherein an oxidation product of the chemical probe is quantified.

44. (Original) The method of claim 43, wherein the oxidation product is quantified by high pressure liquid chromatography, mass spectrometry, ultraviolet light spectrophotometry, visible light spectrophotometry, liquid chromatography, gas spectrometry, or liquid chromatography linked mass spectrometry.